

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Leslie Jerome Schonberg

Serial No.: 10/064,732

Group Art Unit: 2179

Filed: August 12, 2002

Examiner: Sara M. Hanne

For: VIRTUAL REALITY METHOD AND  
APPARATUS WITH IMPROVED NAVIGATION

Attorney Docket No.: 81046469

I hereby certify that this correspondence is being deposited with the United States Patent Office via U.S. mail to  
Examiner Sara M. Hanne on:

3/13/2006

(Date of Deposit)

(Signature)

**DECLARATION OF PRIOR INVENTION IN THE**  
**UNITED STATES TO OVERCOME**  
**A CITED PATENT PURSUANT TO 37 CFR § 1.131**

Mail Stop Non-Fee Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

I, Leslie Jerome Schonberg, state as follows:

1. I am a citizen of the United States and all reside in the State of Michigan.
2. I am the inventor of U.S. Serial No. 10/064,732.
3. The Virtual Reality Method and Apparatus With Improved Navigation disclosed and claimed in the subject patent application was conceived in the United States prior to March 6, 2002, which is the effective date of the reference Schileru-Key Publication (U.S. Publication No. US 2002/0093541 A1).
4. The Virtual Reality Method and Apparatus With Improved Navigation disclosed and claimed in the subject patent application was developed with diligence from the time of conception continuously through the filing of this application.

Serial No. 10/064,732

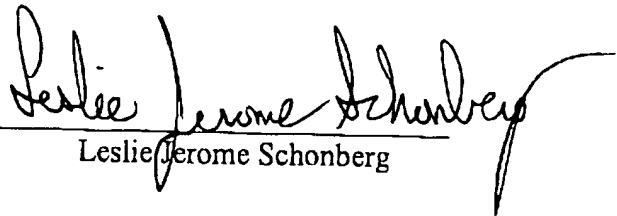
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5. Enclosed with this Declaration, and identified as Exhibit A, is a copy of a document which discloses the date of the conception of the Virtual Reality Method and Apparatus With Improved Navigation as claimed in the present invention.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of the Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: March 13, 2006

  
\_\_\_\_\_  
Leslie Jerome Schonberg



Docket Number

201-0130

Invention

Prior Art

Priority Application

File History

Correspondence

Attorney: Pending • Completed • Pending Secondary • Recently Completed Secondary |

EXHIBIT A

Invention Disclosure for [REDACTED]

Attorney: Pending: Invention Disclosure for 201 [REDACTED]

SECTION 1: INVENTION DESCRIPTION

**Title** USING WAYPOINTS TO IMPROVE NAVIGATION EASE IN A VIRTUAL REALITY WORLD

**Date Created** [REDACTED]

**Committee** [REDACTED]

**CPSC** [REDACTED]

**Originating Country** [REDACTED]

SECTION 2: PROBLEM AND SOLUTION

**Description**

Problem: Virtual reality (VR) simulation usage as a training tool is growing. It improves learning by more fully engaging the student in the learning process. However, to affectively interact with the simulation in real-time, the student must be comfortable using the computer's interface devices. These devices are typically the keyboard and mouse, neither of which was designed for interactive simulation use. In existing simulations, users may be expected to simultaneously control several avatar (the virtual human in a simulation) functions such as: body motions to walk in the virtual world of a 3D simulation, head motions to look around, hand motions, etc. A mouse can be used to control all these activities if the user is able to keep the mouse in constant motion as simulation events unfold. Unfortunately many users find mouse usage in this fashion too difficult and tiring. Other interface devices are available that are better suited for interactive work, but these devices increase ownership and maintenance costs. Solution: Reduce the amount of mouse activity needed without compromising the training benefits to be gained from a VR simulation. This invention introduces "waypoints" as a different way to navigate in a virtual world that reduces mouse activity. Waypoints are user-selected spots in the virtual world that outline a path the avatar navigates. The avatar walks straight from one waypoint to the next in order. With just a few mouse clicks the user can mark-out a path of any complexity more easily and quickly than with the present technique that requires guiding the mouse through an entire route. The current technique takes longer to trace a route, is more physically and mentally demanding of the user, and is less precise than the waypoint method. Since

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Date of Working Model 11/15/00

Planned Usage [REDACTED] 05/04/2004

SECTION 7: CATEGORY QUESTIONS

Invention Category	Process
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Question	[REDACTED]
Response	[REDACTED]

SECTION 8: MISCELLANEOUS

Is it a Government Contract? N

Government Number [REDACTED]

Agreements [REDACTED]

Disclosed To [REDACTED]

SECTION 9: FILE ATTACHMENTS

Filename	Description
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]

SECTION 10: INVENTORSHIP

CDS or other Id [REDACTED]

Lastname Schonberg

Firstname Leslie

Middlename Jerome

Email [REDACTED]

Employee Type [REDACTED]

Employee Status [REDACTED]

Job Title [REDACTED]

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